8 E	7 E	6 H	5 H	4	3 H	2	1	
BRS	BRS	BRS	BRS	BRS	BRS	BRS	BRS	Type
L8	L7	16	L5	4	L3	1.2	[]	L#
13	61		97	17246	12	40255	427	Hits
l same recombinant	l same synthetic	5 same 2	1 same 4	(immunoglobulin adj light adj chain) or (amyloid adj A adj protein) or (beta adj 2-microglobulin) or transthyretin or (cystatin adj C) or gelsolin or procalcitomin or (prp adj protein) or (amyloid adj beta-protein) or (apoA adj (amyloid adj fibril )) or lysozyme	1 same 2	immune adj response	amyloid adj fibril	Search Text
USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:07	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:07	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:07	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:06	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT	USPAT; US-PGPUB; EPO; JPO; DERWENT	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 12:52	USPAT; US-PGPUB; EPO; JPO; DERWENT	DBs
2003/09/ 25 13:07	2003/09/ 25 13:07	2003/09/ 25 13:07	2003/09/ 25 13:06	2003/09/ 25 13:06	2003/09/ 25 13:06	2003/09/ 25 12:52	2003/09/ 25 12:50	Time Stamp
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								Error Definiti on
0	0	0	0	0	0	0	0	Err

	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comm	Error Definiti on	Eri
9	BRS	L9	35	1 same homologous	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:08	2003/09/ 25 13:08			
10	BRS	L10		l same heterologous	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:08	2003/09/ 25 13:08			:
=	BRS	L11	4	( 7 or 8 or 9 or 10) same 2	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:09	2003/09/ 25 13:09			
12	BRS	L12	45468	vaccine	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:09	2003/09/ 25 13:09			1
13	BRS	L13	4	12 same 1	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:10	2003/09/ 25 13:10			
14	BRS	L14	81619	81619 adjuvant	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:13	2003/09/ 25 13:13			0
15	BRS	L15	2	13 same 14	USPAT; US-PGPUB; EPO; 2003/09/ JPO; DERWENT 25 13:13	2003/09/ 25 13:13			

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FILE 'CAPLUS' ENTERED AT 13:19:33 ON 25 SEP 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'BIOSIS' ENTERED AT 13:19:33 ON 25 SEP 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)
FILE 'EMBASE' ENTERED AT 13:19:33 ON 25 SEP 2003
COPYRIGHT (C) 2003 Elsevier Inc. All rights reserved.
FILE 'SCISEARCH' ENTERED AT 13:19:33 ON 25 SEP 2003
COPYRIGHT 2003 THOMSON ISI
FILE 'AGRICOLA' ENTERED AT 13:19:33 ON 25 SEP 2003
=> s amyloid fibril
L1
              9106 AMYLOID FIBRIL
=> s immune response
           378632 IMMUNE RESPONSE
=> s (immunoglobin light chain) or (amyloid A protein) or (beta 2-microglobulin) or transthyretin
    4 FILES SEARCHED...
            55029 (IMMUNOGLOBIN LIGHT CHAIN) OR (AMYLOID A PROTEIN) OR (BETA 2-MIC
                     ROGLOBULIN) OR TRANSTHYRETIN OR (CYSTATIN C) OR GELSOLIN OR
                     PROCLACITONIN OR (PRP PROTEIN)
=> s (amyloid beta-protein) or (apoA 1) or lysozyme
           103850 (AMYLOID BETA-PROTEIN) OR (APOA 1) OR LYSOZYME
=> s 11 (p) 12
                16 L1 (P) L2
=> duplicate remove 15
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
                   6 DUPLICATE REMOVE L5 (10 DUPLICATES REMOVED)
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      ANSWER 1 OF 6
                               MEDLINE on STN
                                                                             DUPLICATE 1
ACCESSION NUMBER:
                           2003379971
                                               IN-PROCESS
DOCUMENT NUMBER:
                           22797269
                                          PubMed ID: 12914815
                           "Eat me" and "don't eat me" signals govern the innate immune response and tissue repair in the CNS: emphasis on the critical role of the complement system.
TITLE:
                           Elward Kristina; Gasque Philippe
AUTHOR:
CORPORATE SOURCE:
                           Brain Inflammation and Immunity Group (BIIG), Department of
                           Medical Biochemistry and Immunology, University of Wales
                           College of Medicine, Cardiff CF144XN, Wales, UK. MOLECULAR IMMUNOLOGY, (2003 Sep) 40 (2-4) 85-94. Journal code: 7905289. ISSN: 0161-5890.
SOURCE:
                           England: United Kingdom
PUB. COUNTRY:
                           Journal; Article; (JOURNAL ARTICLE)
DOCUMENT TYPE:
LANGUAGE:
FILE SEGMENT:
                           IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE:
                           Entered STN: 20030814
                           Last Updated on STN: 20030913
      A full innate immune system (e.g. complement system, scavenger receptors, Toll-like receptors (TLR)) has been described in the CNS and is thought to be an extremely efficient army designed to fight against invading
      pathogens and toxic cell debris such as apoptotic cells and ***amyloid*** ***fibrils*** . The binding of soluble
                                                      . The binding of soluble or secreted
      innate immune molecules on pathogen-associated molecular patterns (PAMPs)
      as well as apoptotic cell-associated molecular patterns (ACAMPs) provide several "eat me" signals to promote the safe disposal of the intruders by professional and amateur phagocytes. These patterns are deciphered by professional contents (nattern processions)
      receptors (pattern recognition receptors, PRRs; e.g. CR3) that control phagocytosis and associated inflammatory response depending on the meaning of these signals. Importantly, in order to avoid excessive collateral damage of surrounding cells, it is increasingly evident matterns.
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me" signals (coined herein as self-associated molecular patterns, SAMPS;

e.g. complement regulatory proteins, CD200) are of paramount importance to signal a robust anti-inflammatry response and promote tissue pair. Further knowledge of the innate \*\*\*immune\*\*\* \*\*\*response \* in the CNS will greatly help to delineate the novel therapeutic routes to protect from CNS inflammation and neurodegeneration.

from CNS inflammation and neurodegeneration. DUPLICATE 2 ANSWER 2 OF 6 MEDLINE on STN 2002632808 ACCESSION NUMBER: **MEDLINE** 22278745 PubMed ID: 12391599 DOCUMENT NUMBER: TITLE: Alzheimer's disease with spastic paresis and cotton wool Tabira Takeshi; Chui De Hua; Nakayama Hiroshi; Kuroda **AUTHOR:** Shigetoshi; Shibuya Makoto National Institute for Longevity Sciences, Obu, Aichi, CORPORATE SOURCE: Japan.. tabira@nils.go.jp JOURNAL OF NEUROSCIENCE RESEARCH, (2002 Nov 1) 70 (3) SOURCE: 367-72. Ref: 21 Journal code: 7600111. ISSN: 0360-4012. PUB. COUNTRY: United States Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: General Review; (REVIEW) (REVIEW OF REPORTED CASES) English LANGUAGE: Priority Journals FILE SEGMENT: ENTRY MONTH: 200212 **ENTRY DATE:** Entered STN: 20021023 Last Updated on STN: 20021218 Entered Medline: 20021213 We reviewed Alzheimer's cases with spastic paresis and cotton wool type AB plaques in five Japanese and nine Caucasian cases. Most were early onset familial Alzheimer's disease with presentlin 1 mutations. The cotton wool type plaques were related to extremely high production of A beta 42, due mainly to presentlin 1 mutations and low \*\*\*immune\*\*\* \*\*\*responses\*\*\* . Cotton wool plaques were numerous in the entire central nervous system, including basal ganglia, brainstem and even in spinal cord. Cotton wool type plaques were composed of slightly electron dense synaptic structures, but \*\*\*amyloid\*\*\* \*\*\*fibrils\*\*\* were dense synaptic structures, but rarely found. Such a high accumulation of A beta 42 may cause degeneration of the pyramidal tract and basal ganglia from an early stage of Alzheimer's disease. Copyright 2002 Wiley-Liss, Inc. ANSWER 3 OF 6 MEDLINE on STN DUPLICATE 3 ACCESSION NUMBER: 2001654245 **MEDLINE** PubMed ID: 11701763 DOCUMENT NUMBER: 21558631 Vaccination with soluble Abeta oligomers generates TITLE: toxicity-neutralizing antibodies. Lambert M P; Viola K L; Chromy B A; Chang L; Morgan T E; Yu J; Venton D L; Krafft G A; Finch C E; Klein W L Department of Neurobiology and Physiology, Northwestern **AUTHOR:** CORPORATE SOURCE: University, Evanston, IL 60208, USA. CONTRACT NUMBER: AG 13499 (NIA) PO1 AG13138 (NIA) SOURCE: JOURNAL OF NEUROCHEMISTRY, (2001 Nov) 79 (3) 595-605. Journal code: 2985190R. ISSN: 0022-3042. PUB. COUNTRY: United States Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: LANGUAGE: English FILE SEGMENT: Priority Journals ENTRY MONTH: 200112 **ENTRY DATE:** Entered STN: 20011115 Last Updated on STN: 20020123 Entered Medline: 20011207 In recent studies of transgenic models of Alzheimer's disease (AD), it has been reported that antibodies to aged beta amyloid peptide 1-42 AB (Abeta(1-42)) solutions (mixtures of Abeta monomers, oligomers and \*\*\*amyloid\*\*\* \*\*\*fibrils\*\*\* ) cause conspicuous reduction of amyloid plaques and neurological improvement. In some cases, however, neurological improvement has been independent of obvious plaque reduction, and it has been suggested that immunization might neutralize soluble, non-fibrillar forms of Abeta. It is now known that Abeta toxicity resides not only in fibrils, but also in soluble protofibrils and oligomers. The current study has investigated the \*\*\*immune\*\*\* \*\*\*response\*\*\* to low doses of Abeta(1-42) ŏligomers and the characteristics of the

antibodies they induce. Rabbits that were injected with Abeta(1-42) solutions containing only monomers and oligomers produced antibodies that preferentially bound to assembled forms of Abeta in immunoblots and in

physiological solutions. The antibodies have proven useful for assays that can detect inhibitors of ligomer formation, for immunof rescence localization of cell-attached oligomers to receptor-like puncta, and for immunoblots that show the presence of SDS-stable oligomers in Alzheimer's brain tissue. The antibodies, moreover, were found to neutralize the toxicity of soluble oligomers in cell culture. Results support the hypothesis that immunizations of transgenic mice derive therapeutic benefit from the immuno-neutralization of soluble Abeta-derived toxins. Analogous immuno-neutralization of oligomers in humans may be a key in AD vaccines.

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ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS ON STN SION NUMBER: 1999:753260 CAPLUS
ACCESSION NUMBER:
                            131:350268
DOCUMENT NUMBER:
                            Amyloid removal using anti-amyloid antibodies
TITLE:
                            Solomon, Alan; Hrncic, Rudi; Wall, Jonathan S
INVENTOR(S):
                            The University of Tennessee Research Corporation, USA
PATENT ASSIGNEE(S):
                            PCT Int. Appl., 34 pp.
SOURCE:
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
                            English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                APPLICATION NO. DATE
      PATENT NO.
                        KIND DATE
     wo 9960024
                         Α1
                               19991125
                                                wo 1999-us11200 19990521
              AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
              JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ,
                       TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
               ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
               CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                CA 1999-2325600
                                                                   19990521
      CA 2325600
                               19991125
                         AA
                               19991206
                                                AU 1999-40075
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                                                                   19990521
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      EP 1078005
                               20010228
                                                                   19990521
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               IE, SI, LT, LV, FI, RO
15235 T2 20020528
     JP 2002515235
                               20020528
                                                JP 2000-549642
                                                                   19990521
     us 2003147882
                               20030807
                                                us 1999-316387
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                         Α1
      ZA 2000007811
                               20020621
                                                ZA 2000-7811
                                                                   20001221
PRIORITY APPLN. INFO.:
                                             US 1998-86198P
                                                               Р
                                                                   19980521
                                             wo 1999-us11200 w 19990521
      The authors disclose that the cell-mediated
                                                         ***immune***
        ***response***
                                             ***amyloid***
                                                                  ***fibrils***
                          to deposits of
      enhanced by the opsonizing activity of anti-amyloid antibodies.
     example, amyloid deposits were shown to resolved in mice given anti-light
      chain antibodies; resoln. was myeloid cell (CD18)-dependent.
REFERENCE COUNT:
                                   THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                                   RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 5 OF 6
                         MEDLINE on STN
                      88312016
ACCESSION NUMBER:
                                     MEDLINE
DOCUMENT NUMBER:
                                   PubMed ID: 3044707
                      88312016
                      Neuropathology of unconventional virus infections:
TITLE:
                      molecular pathology of spongiform change and amyloid plaque
                      deposition.
AUTHOR:
                      Masters C L; Beyreuther K
CORPORATE SOURCE:
                      Department of Pathology, University of Western Australia,
                      Perth.
SOURCE:
                      CIBA FOUNDATION SYMPOSIUM, (1988) 135 24-36.
                      Journal code: 0356636. ISSN: 0300-5208.
PUB. COUNTRY:
                      Netherlands
DOCUMENT TYPE:
                      Journal; Article; (JOURNAL ARTICLE)
                      General Review; (REVIEW)
                      (REVIEW, TUTORIAL)
LANGUAGE:
                      English
FILE SEGMENT:
                      Priority Journals
ENTRY MONTH:
                      198809
ENTRY DATE:
                      Entered STN: 19900308
                      Last Updated on STN: 19980206
                      Entered Medline: 19880927
     To the triad of neuronal loss, gliosis and spongiform change as
```

characteristic morphological changes associated with infection of the

central nervous system, one now add the presence of scrapic-associated filaments (SAF)/PrP rods. We the host's \*\*\*immune\*\*\* \*\*\*response\*\*\* is conspicuous by its absence, the vigorous astrocytic response is presumptive evidence of the host's ability to recognize and respond to the primary neuronal insult. We assume that the spongiform change and vacuolation of neurons are of fundamental importance in the pathogenesis of the disease, realizing that neither is specific or essential for the replication of the infectious agent. The topographical distribution of lesions is partly explained by the portal of entry and retrograde spread of the virus. The temporal progression of the lesions is more clearly determined by the host genes, best illustrated by studies of the incubation period. The molecular basis of the spongiform change is unknown but it is presumed to involve some disturbance of membrane metabolism. The recognition of PrP as a membrane glycoprotein invites proposals for its role in the development of these spongiform lesions. Extracellular amyloid occurs as plaques or congophilic angiopathy in some instances, and provides the best evidence that Alzheimer's disease (AD) is in some way related to the unconventional virus diseases. However, the \*\*\*amyloid\*\*\* \*\*\*fibril\*\*\* protein subunit (A4) of the its precursor are quite distinct from the PrP subunit which constitutes the \*\*\*amyloid\*\*\* \*\*\*fibril\*\*\* in these infectious discourses the \*\*\*amyloid\*\*\* \*\*\*fibril\*\*\* in these infectious diseases. It is still unclear whether the PrP subunit in the SAF has exactly the same composition as in the extracellular \*\*\*amyloid\*\*\* \*\*\*fibril\*\*\* composition as in the extracellular Our results suggest that only a fragment of the PrP molecule is the major constituent of the extracellular fibril. Since both PrP and A4 are derived from membrane glycoproteins, the elucidation of their normal function is likely to lead to a better understanding of the spongiform and

ANSWER 6 OF 6 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.

on STN ACCESSION NUMBER:

80091190 EMBASE

DOCUMENT NUMBER:

1980091190

amyloidogenic lesions in these diseases.

TITLE:

[Pathological immunology of amyloidosis].

IMMUNOPATOLOGIA DELL'AMILOIDOSI.

AUTHOR: Clerici E.

CORPORATE SOURCE:

Catt. Immunol., Univ. Studi, Milano, Italy

SOURCE:

Giornale di Gerontologia, (1979) 27/9 (577-582).

CODEN: GIGEAU

COUNTRY: DOCUMENT TYPE: Italy Journal

FILE SEGMENT:

020 Gerontology and Geriatrics

005 General Pathology and Pathological Anatomy

026 Immunology, Serology and Transplantation

LANGUAGE: Italian SUMMARY LANGUAGE: English

Amyloidosis has as it distinguishing feature deposits of antiparallel .beta.-pleated sheet fibrils which are responsible for the pathologic manifestations of the disease. In a group of cases the protein of the fibrils is mainly composed by light polypeptide chain and/or its amino-terminal fragment. In another group of cases the major fibril protein is of a yet unknown origin. Often, if not invariably, an

immunoglobulin protein is also found in these cases. During the experimental casein amyloidosis in mice, the percentage of B-lymphocytes and the macrophages of the spleen increases, while that of T-lymphocyts significantly decreases as compared to controls. Contemporaneously to these cellular modifications, both the in vivo and in vitro \*\*\*immune\*\*\*

\*\*\*response\*\*\* to foreign antigens is sharply reduced, as compared to that of the normal counterparts. It is suggested that such cellular and functional alterations are compatible with a sterile blastogenesis and

functional alterations are compatible with a sterile blastogenesis and with an\_aspecific\_hyperproduction of immunoglobulin light chains or immunoglobulin-related polypeptides which are either transformed or incorporated into \*\*\*amyloid\*\*\* \*\*\*fibrils\*\*\* .

=> d his

L1 L2

L3

L4 L5 (FILE 'HOME' ENTERED AT 13:19:07 ON 25 SEP 2003)

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FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 13:19:33 ON 25 SEP 2003
       9106 S AMYLOID FIBRIL
```

378632 S IMMUNE RESPONSE

55029 S (IMMUNOGLOBIN LIGHT CHAIN) OR (AMYLOID A PROTEIN) OR (BETA 2-103850 S (AMYLOID BETA-PROTEIN) OR (APOA 1) OR LYSOZYME

16 S L1 (P) L2

6 DUPLICATE REMOVE L5 (10 DUPLICATES REMOVED)

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=> s 11 (p) (13 or 14)
            2050 L1 (P) (L3 OR L4)
=> s 12 (p) 17
                0 L2 (P) L7
=> s l6 (p) remov? (p) (amyloid deposit)
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L55 (P) REMOV?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'REMOV? (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L59 (P) REMOV?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'REMOV? (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L61 (P) REMOV?'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'REMOV? (P)
                0 L6 (P) REMOV? (P) (AMYLOID DEPOSIT)
=> s l1 (p) (synthetic or recombinant or homologous or hetrologous)
            1005 L1 (P) (SYNTHETIC OR RECOMBINANT OR HOMOLOGOUS OR HETROLOGOUS)
L10
=> s vaccine
         399015 VACCINE
111
=> s 111 (p) 11
              21 L11 (P) L1
L12
=> s 112 (p) 12
                5 L12 (P) L2
L13
=> duplicate remove 113
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L13
                 1 DUPLICATE REMOVE L13 (4 DUPLICATES REMOVED)
=> d 114 1 ibib abs
L14 ANSWER 1 OF 1
                            MEDLINE on STN
                                                                    DUPLICATE 1
                        2001654245
ACCESSION NUMBER:
                                          MEDLINE
                                      PubMed ID: 11701763
DOCUMENT NUMBER:
                        21558631
                        Vaccination with soluble Abeta oligomers generates
TITLE:
                        toxicity-neutralizing antibodies.
AUTHOR:
                        Lambert M P; Viola K L; Chromy B A; Chang L; Morgan T E; Yu
                        J; Venton D´L; Krafft Ġ A; Finch C´E; Klein´W L
Department of Neurobiology and Physiology, Northwestern
CORPORATE SOURCE:
                        University, Evanston, IL 60208, USA.
                        AG 13499 (NIA)
CONTRACT NUMBER:
      PO1 AG13138 (NIA)
SOURCE:
                        JOURNAL OF NEUROCHEMISTRY, (2001 Nov) 79 (3) 595-605.
                        Journal code: 2985190R. ISSN: 0022-3042.
                        United States
PUB. COUNTRY:
DOCUMENT TYPE:
                        Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:
                        English
FILE SEGMENT:
                        Priority Journals
ENTRY MONTH:
                        200112
ENTRY DATE:
                        Entered STN: 20011115
                        Last Updated on STN: 20020123
                        Entered Medline: 20011207
      In recent studies of transgenic models of Alzheimer's disease (AD), it has
     been reported that antibodies to aged beta amyloid peptide 1-42 (Abeta(1-42)) solutions (mixtures of Abeta monomers, oligomers and ***amyloid*** ***fibrils*** ) cause conspicuous reduction of amyloid
      plaques and neurological improvement. In some cases, however,
      neurological improvement has been independent of obvious plague reduction.
     and it has been suggested that immunization might neutralize soluble,
     non-fibrillar forms of Abeta. It is now known that Abeta toxicity resides
     not only in fibrils, but also in soluble protofibrils and oligomers. current study has investigated the ***immune*** ***response***
     current study has investigated the ***immune*** ***response*** low doses of Abeta(1-42) oligomers and the characteristics of the antibodies they induce. Rabbits that were injected with Abeta(1-42)
     solutions containing only monomers and oligomers produced antibodies that preferentially bound to assembled forms of Abeta in immunoblots and in
```

physiological solutions. The entibodies have proven useful for assays that can detect inhibitors of ligomer formation, for immunof rescence localization of cell-attached oligomers to receptor-like puncta, and for immunoblots that show the presence of SDS-stable oligomers in Alzheimer's brain tissue. The antibodies, moreover, were found to neutralize the toxicity of soluble oligomers in cell culture. Results support the hypothesis that immunizations of transgenic mice derive therapeutic benefit from the immuno-neutralization of soluble Abeta-derived toxins. Analogous immuno-neutralization of oligomers in humans may be a key in AD \*\*\*vaccines\*\*\*

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L15
         230166 ADJUVANT
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L1
            9106 S AMYLOID FIBRIL
L2
          378632 S IMMUNE RESPONSE
L3
           55029 S (IMMUNOGLOBIN LIGHT CHAIN) OR (AMYLOID A PROTEIN) OR (BETA 2-
L4
          103850 S (AMYLOID BETA-PROTEIN) OR (APOA 1) OR LYSOZYME
L5
              16 S L1 (P) L2
               6 DUPLICATE REMOVE L5 (10 DUPLICATES REMOVED)
L6
L7
            2050 S L1 (P) (L3 OR L4)
L8
                  L2 (P) L7
                   L6 (P) REMOV? (P) (AMYLOID DEPOSIT)
L9
            1005
                S L1 (P) (SYNTHETIC OR RECOMBINANT OR HOMOLOGOUS OR HETROLOGOUS
L10
L11
          399015 S VACCINE
L12
              21 S L11 (P) L1
                S L12 (P) L2
L13
L14
               1 DUPLICATE REMOVE L13 (4 DUPLICATES REMOVED)
          230166 S ADJUVANT
L15
=> s 112 (p) 115
              8 L12 (P) L15
L16
=> s 116 (p) 12
              0 L16 (P) L2
L17
=> d his
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     13:19:33 ON 25 SEP 2003
L1
            9106 S AMYLOID FIBRIL
L2
          378632 S IMMUNE RESPONSE
L3
           55029 S (IMMUNOGLOBIN LIGHT CHAIN) OR (AMYLOID A PROTEIN) OR (BETA 2-
L4
          103850 S (AMYLOID BETA-PROTEIN) OR (APOA 1) OR LYSOZYME
L5
                5 L1 (P) L2
L6
                DUPLICATE REMOVE L5 (10 DUPLICATES REMOVED)
L7
            2050 S L1 (P) (L3 OR L4)
L8
                S L2 (P) L7
L9
               0 S L6 (P) REMOV? (P) (AMYLOID DEPOSIT)
            1005 S L1 (P) (SYNTHETIC OR RECOMBINANT OR HOMOLOGOUS OR HETROLOGOUS
L10
L11
         399015 S VACCINE
L12
              21 S L11 (P) L1
L13
                 S L12 (P) L2
L14
                DUPLICATE REMOVE L13 (4 DUPLICATES REMOVED)
L15
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L16
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               8
               0 S L16 (P) L2
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L18
           173 SOLOMON ALAN/AU
=> s wall jonathan/au
L19
            15 WALL JONATHAN/AU
=> s hrncic rudi/au
            14 HRNCIC RUDI/AU
=> s schell maria/au
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=> s 122 and 16
              1 L22 AND L6
L23
=> d 123 1 ibib abs
L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
                           1999:753260 CAPLUS
ACCESSION NUMBER:
                           131:350268
DOCUMENT NUMBER:
                           Amyloid removal using anti-amyloid antibodies ***Solomon, Alan***; ***Hrncic, Rudi***
TITLE:
INVENTOR(S):
                           Jonathan S.
                           The University of Tennessee Research Corporation, USA
PATENT ASSIGNEE(S):
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                              19991125
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              DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
              JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
              MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
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              ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
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                                              CA 1999-2325600
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                                              ZA 2000-7811
                                                                 20001221
PRIORITY APPLN. INFO.:
                                           US 1998-86198P
                                                                 19980521
                                           wo 1999-us11200 w 19990521
     The authors disclose that the cell-mediated
                                                       ***immune***
AB
     ***response*** to deposits of ***amyloid*** ***fibrils*** is enhanced by the opsonizing activity of anti-amyloid antibodies. In one
     example, amyloid deposits were shown to resolved in mice given anti-light
      chain antibodies; resoln. was myeloid cell (CD18)-dependent.
REFERENCE COUNT:
                                 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d his
      (FILE 'HOME' ENTERED AT 13:19:07 ON 25 SEP 2003)
     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
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            9106 S AMYLOID FIBRIL
L1
L2
          378632 S IMMUNE RESPONSE
L3
                    (IMMUNOGLOBIN LIGHT CHAIN) OR (AMYLOID A PROTEIN) OR (BETA 2-
L4
          103850 S
                   (AMYLOID BETA-PROTEIN) OR (APOA 1) OR LYSOZYME
L5
              16 S L1 (P) L2
L6
               6 DUPLICATE REMOVE L5 (10 DUPLICATES REMOVED)
L7
            2050 S L1 (P) (L3 OR L4)
                S L2 (P) L7
L8
L9
                 S L6 (P) REMOV? (P) (AMYLOID DEPOSIT)
            1005 S L1 (P) (SYNTHETIC OR RECOMBINANT OR HOMOLOGOUS OR HETROLOGOUS
L10
L11
          399015
                 S VACCINE
ı 12
                 S L11 (P) L1
L13
                 S L12 (P) L2
L14
               1 DUPLICATE REMOVE L13 (4 DUPLICATES REMOVED)
          230166 S ADJUVANT
L15
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L16

8 S L12 (P) L15

L17		
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL SESSION
CA SUBSCRIBER PRICE	ENTRY -1.30	-1.30
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